ABSTRACT OF THE DISCLOSURE

It is an object of this invention to prevent a false edge phenomenon in quantization processing for a multilevel image. In order to achieve this object, according to the invention, (1) a reference threshold (Cthreshold) to be used for error diffusion for a cyan (C) component is obtained on the basis of a density value M of a magenta (M) component. (2) A threshold modulation amount table is referred to by using a combination of a density value C of the C component and the density value M of the M component. (3) A correction threshold modulation amount Cthreshold' is determined by adding the threshold modulation amount obtained in the second step to the reference threshold Cthreshold to be used for error diffusion for the C component. (4) A density Ct after error diffusion for the C component is compared with the correction threshold Cthreshold'. If the density Ct is higher, a quantization value binDataC of the target pixel is set to 255. If the density Ct is lower, the quantization value is set to 0. The same processing as described above is also performed for the cyan component.